

=====

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Durreshwar Anjum

Timestamp: [year=2010; month=4; day=22; hr=15; min=30; sec=57; ms=453;]

=====

Application No: 10560260 Version No: 3.0

Input Set:

Output Set:

Started: 2010-04-19 16:13:40.227
Finished: 2010-04-19 16:13:44.129
Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 902 ms
Total Warnings: 75
Total Errors: 0
No. of SeqIDs Defined: 75
Actual SeqID Count: 75

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)

Input Set:

Output Set:

Started: 2010-04-19 16:13:40.227
Finished: 2010-04-19 16:13:44.129
Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 902 ms
Total Warnings: 75
Total Errors: 0
No. of SeqIDs Defined: 75
Actual SeqID Count: 75

Error code	Error Description
	This error has occurred more than 20 times, will not be displayed

SEQUENCE LISTING

<110> Segura, Dorotea Raventos
Mygind, Per Holse
Hoegenhaug, Hans-Henrik Kristensen
Hoegenhaug, Hans-Henrik Kristensen
Tossi, Alessandro

<120> Antimicrobial Peptides

<130> 10328.204-US

<140> 10560260
<141> 2010-04-19

<160> 75

<170> PatentIn version 3.5

<210> 1
<211> 29
<212> PRT
<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<220>

<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa = leucine or arginine

<220>

<221> MISC_FEATURE
<222> (3)..(3)
<223> Xaa = leucine, isoleucine, valine or phenylalanine

<220>

<221> MISC_FEATURE
<222> (4)..(4)
<223> Xaa = arginine or lysine

<220>

<221> MISC_FEATURE
<222> (6)..(6)
<223> Xaa = leucine, isoleucine, valine or phenylalanine

<220>

<221> MISC_FEATURE
<222> (7)..(7)
<223> Xaa = arginine, lysine, tryptophan or glycine

<220>

<221> MISC_FEATURE
<222> (8)..(8)
<223> Xaa = lysine, arginine, glycine, methionine, asparagine or

glutamic acid

<220>
<221> MISC_FEATURE
<222> (11) .. (11)
<223> Xaa = glycine, lysine, arginine or glutamic acid

<220>
<221> MISC_FEATURE
<222> (12) .. (12)
<223> Xaa = lysine, arginine, glycine or glutamic acid

<220>
<221> MISC_FEATURE
<222> (14) .. (14)
<223> Xaa = leucine or phenylalanine

<220>
<221> MISC_FEATURE
<222> (15) .. (15)
<223> Xaa = lycine or arginine

<220>
<221> MISC_FEATURE
<222> (17) .. (17)
<223> Xaa = leucine, isoleucine, phenylalanine, cysteine or tyrosine

<220>
<221> MISC_FEATURE
<222> (18) .. (18)
<223> Xaa = glycine, alanine or threonine

<220>
<221> MISC_FEATURE
<222> (19) .. (19)
<223> Xaa = glutamine, arginine, leucine or proline

<220>
<221> MISC_FEATURE
<222> (20) .. (20)
<223> Xaa = lysine, leucine, isoleucine, methionine or valine

<220>
<221> MISC_FEATURE
<222> (23) .. (23)
<223> Xaa = proline, alanine, histidine, asparagine or aspartic acid

<220>
<221> MISC_FEATURE
<222> (24) .. (24)
<223> Xaa = isoleucine or leucine

<220>
<221> MISC_FEATURE
<222> (25) .. (25)
<223> Xaa = arginine, histidine, glutamine or proline

<220>
<221> MISC_FEATURE
<222> (26)..(26)
<223> Xaa = isoleucine or lysine

<400> 1

Gly Xaa Xaa Xaa Arg Xaa Xaa Xaa Lys Ile Xaa Xaa Lys Xaa Xaa Lys
1 5 10 15

Xaa Xaa Xaa Xaa Ile Lys Xaa Xaa Xaa Xaa Leu Val Pro
20 25

<210> 2
<211> 29
<212> PRT
<213> Artificial

<220>
<223> Synthetic antimicrobial peptide

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa = leucine or arginine

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> Xaa = leucine, isoleucine, valine or phenylalanine

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Xaa = arginine or lysine

<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> Xaa = leucine, isoleucine, valine or phenylalanine

<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> Xaa = arginine, tryptophane or glycine

<220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> Xaa = lysine, arginine, glycine, methionine, asparagine or
glutamic acid

<220>
<221> MISC_FEATURE

<222> (11) .. (11)
<223> Xaa = glycine, lysine, arginine or glutamic acid

<220>
<221> MISC_FEATURE
<222> (12) .. (12)
<223> Xaa = lysine, arginine, glycine or glutamic acid

<220>
<221> MISC_FEATURE
<222> (14) .. (14)
<223> Xaa = leucine or phenylalanine

<220>
<221> MISC_FEATURE
<222> (17) .. (17)
<223> Xaa = isoleucine, phenylalanine, cysteine or tyrosine

<220>
<221> MISC_FEATURE
<222> (19) .. (19)
<223> Xaa = glutamine, leucine or proline

<220>
<221> MISC_FEATURE
<222> (20) .. (20)
<223> Xaa = lysine, leucine, isoleucine, methionine or valine

<220>
<221> MISC_FEATURE
<222> (23) .. (23)
<223> Xaa = proline, alanine, histidine, asparagine or aspartic acid

<220>
<221> MISC_FEATURE
<222> (24) .. (24)
<223> Xaa = isoleucine or leucine

<220>
<221> MISC_FEATURE
<222> (25) .. (25)
<223> Xaa = arginine, histidine, glutamine or proline

<220>
<221> MISC_FEATURE
<222> (26) .. (26)
<223> Xaa = isoleucine or lysine

<400> 2

Gly Xaa Xaa Xaa Arg Xaa Xaa Xaa Lys Ile Xaa Xaa Lys Xaa Lys Lys
1 5 10 15

Xaa Gly Xaa Xaa Ile Lys Xaa Xaa Xaa Xaa Leu Val Pro

<210> 3
<211> 29
<212> PRT
<213> Artificial

<220>
<223> Synthetic antimicrobial peptide (Cat1)

<400> 3

Gly Leu Leu Arg Arg Leu Arg Lys Lys Ile Gly Lys Lys Leu Lys Lys
1 5 10 15

Ile Gly Gln Lys Ile Lys Pro Ile Arg Ile Leu Val Pro
20 25

<210> 4
<211> 29
<212> PRT
<213> Artificial

<220>
<223> Synthetic antimicrobial peptide

<400> 4

Gly Leu Leu Arg Arg Leu Arg Gly Lys Ile Gly Lys Lys Leu Lys Lys
1 5 10 15

Ile Gly Gln Lys Ile Lys Ala Ile Arg Lys Leu Val Pro
20 25

<210> 5
<211> 29
<212> PRT
<213> Artificial

<220>
<223> Synthetic antimicrobial peptide

<400> 5

Gly Leu Leu Arg Arg Phe Arg Lys Lys Ile Gly Gly Lys Leu Lys Lys
1 5 10 15

Tyr Gly Gln Ile Ile Lys His Leu Arg Ile Leu Val Pro
20 25

<210> 6
<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 6

Gly Leu Leu Arg Arg Leu Arg Arg Lys Ile Gly Gly Lys Leu Lys Lys
1 5 10 15

Phe Gly Gln Lys Ile Lys Pro Leu Arg Lys Leu Val Pro

20 25

<210> 7

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 7

Gly Leu Leu Arg Arg Leu Arg Lys Lys Ile Gly Lys Lys Leu Lys Lys
1 5 10 15

Phe Gly Gln Lys Ile Lys His Ile Arg Ile Leu Val Pro

20 25

<210> 8

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 8

Gly Leu Leu Lys Arg Leu Gly Arg Lys Ile Gly Lys Lys Leu Lys Lys
1 5 10 15

Phe Gly Gln Lys Ile Lys Ala Ile Arg Lys Leu Val Pro

20 25

<210> 9

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 9

Gly Arg Phe Lys Arg Phe Trp Lys Lys Ile Gly Arg Lys Phe Lys Lys
1 5 10 15

Ile Gly Gln Met Leu Lys Pro Ile Arg Ile Leu Val Pro
20 25

<210> 10

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 10

Gly Leu Leu Lys Arg Leu Arg Lys Lys Ile Gly Lys Lys Leu Lys Lys
1 5 10 15

Ile Gly Pro Lys Ile Lys His Ile Arg Lys Leu Val Pro
20 25

<210> 11

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 11

Gly Leu Leu Arg Arg Phe Trp Met Lys Ile Gly Gly Lys Leu Lys Lys
1 5 10 15

Phe Gly Gln Met Ile Lys His Leu Arg Lys Leu Val Pro
20 25

<210> 12

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 12

Gly Arg Leu Arg Arg Leu Arg Arg Lys Ile Gly Glu Lys Leu Lys Lys
1 5 10 15

Phe Gly Gln Val Ile Lys Ala Leu Arg Ile Leu Val Pro
20 25

<210> 13

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 13

Gly Leu Leu Arg Arg Leu Trp Arg Lys Ile Gly Arg Lys Leu Lys Lys
1 5 10 15

Tyr Gly Gln Lys Ile Lys Ala Leu Arg Lys Leu Val Pro
20 25

<210> 14

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 14

Gly Arg Phe Arg Arg Phe Arg Lys Lys Ile Gly Lys Lys Leu Lys Lys
1 5 10 15

Ile Gly Leu Val Ile Lys His Ile Arg Ile Leu Val Pro
20 25

<210> 15

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 15

Gly Leu Leu Arg Arg Leu Arg Arg Lys Ile Gly Lys Lys Leu Lys Lys

1 5 10 15

Phe Gly Gln Lys Ile Lys His Ile Arg Ile Leu Val Pro
20 25

<210> 16
<211> 29
<212> PRT
<213> Artificial

<220>
<223> Synthetic antimicrobial peptide

<400> 16

Gly Leu Leu Arg Arg Leu Arg Asn Lys Ile Arg Lys Lys Leu Lys Lys
1 5 10 15

Phe Gly Gln Lys Ile Lys Ala Ile Arg Ile Leu Val Pro
20 25

<210> 17
<211> 29
<212> PRT
<213> Artificial

<220>
<223> Synthetic antimicrobial peptide

<400> 17

Gly Arg Leu Arg Arg Leu Trp Arg Lys Ile Gly Arg Lys Leu Lys Lys
1 5 10 15

Tyr Gly Gln Val Ile Lys His Leu Arg Ile Leu Val Pro
20 25

<210> 18
<211> 29
<212> PRT
<213> Artificial

<220>
<223> Synthetic antimicrobial peptide

<400> 18

Gly Leu Phe Lys Arg Leu Arg Lys Lys Ile Gly Lys Lys Leu Lys Lys
1 5 10 15

Phe Gly Gln Lys Ile Lys Pro Leu Arg Lys Leu Val Pro
20 25

<210> 19
<211> 29
<212> PRT
<213> Artificial

<220>
<223> Synthetic antimicrobial peptide

<400> 19

Gly Leu Leu Arg Arg Phe Gly Arg Lys Ile Gly Lys Lys Phe Lys Lys
1 5 10 15

Phe Gly Pro Lys Ile Lys His Leu Arg Lys Leu Val Pro
20 25

<210> 20
<211> 29
<212> PRT
<213> Artificial

<220>
<223> Synthetic antimicrobial peptide

<400> 20

Gly Leu Phe Arg Arg Phe Arg Arg Lys Ile Gly Lys Lys Leu Lys Lys
1 5 10 15

Phe Gly Gln Lys Ile Lys Pro Leu Arg Lys Leu Val Pro
20 25

<210> 21
<211> 29
<212> PRT
<213> Artificial

<220>
<223> Synthetic antimicrobial peptide

<400> 21

Gly Leu Leu Arg Arg Phe Arg Arg Lys Ile Gly Arg Lys Leu Lys Lys
1 5 10 15

Tyr Gly Leu Met Ile Lys Pro Leu Arg Lys Leu Val Pro
20 25

<210> 22
<211> 29
<212> PRT
<213> Artificial

<220>
<223> Synthetic antimicrobial peptide

<400> 22

Gly Leu Leu Lys Arg Phe Arg Gly Lys Ile Gly Lys Lys Leu Lys Lys
1 5 10 15

Tyr Gly Gln Leu Ile Lys Ala Ile Arg Ile Leu Val Pro
20 25

<210> 23
<211> 29
<212> PRT
<213> Artificial

<220>
<223> Synthetic antimicrobial peptide

<400> 23

Gly Leu Phe Arg Arg Leu Arg Lys Lys Ile Gly Lys Lys Leu Lys Lys
1 5 10 15

Ile Gly Gln Leu Ile Lys Ala Ile Arg Ile Leu Val Pro
20 25

<210> 24
<211> 29
<212> PRT
<213> Artificial

<220>
<223> Synthetic antimicrobial peptide

<400> 24

Gly Leu Leu Arg Arg Phe Gly Lys Lys Ile Gly Lys Lys Phe Lys Lys
1 5 10 15

Tyr Gly Gln Lys Ile Lys Asn Leu Arg Ile Leu Val Pro
20 25

<210> 25
<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 25

Gly Leu Leu Lys Arg Leu Arg Lys Lys Ile Gly Lys Lys Leu Lys Lys
1 5 10 15

Ile Gly Gln Lys Ile Lys Pro Ile Arg Lys Leu Val Pro
20 25

<210> 26

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 26

Gly Leu Leu Arg Arg Phe Gly Arg Lys Ile Gly Lys Lys Phe Lys Lys
1 5 10 15

Phe Gly Pro Lys Ile Lys His Leu Arg Lys Leu Val Pro
20 25

<210> 27

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 27

Gly Arg Leu Arg Arg Leu Arg Arg Lys Ile Arg Lys Lys Leu Lys Lys
1 5 10 15

Tyr Gly Gln Lys Ile Lys Ala Ile Arg Lys Leu Val Pro
20 25

<210> 28

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 28

Gly Arg Phe Arg Arg Phe Arg Lys Lys Ile Gly Gly Lys Leu Lys Lys
1 5 10 15

Ile Gly Gln Val Ile Lys Asp Ile Arg Ile Leu Val Pro
20 25

<210> 29

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 29

Gly Arg Phe Arg Arg Phe Arg Lys Lys Ile Gly Lys Lys Phe Lys Lys
1 5 10 15

Phe Gly Gln Met Ile Lys Ala Leu Arg Ile Leu Val Pro
20 25

<210> 30

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 30

Gly Arg Leu Arg Arg Phe Arg Lys Lys Ile Gly Lys Lys Leu Lys Lys
1 5 10 15

Ile Gly Gln Met Ile Lys His Ile Arg Ile Leu Val Pro
20 25

<210> 31

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 31

Gly Leu Val Arg Arg Phe Arg Arg Lys Ile Gly Lys Lys Leu Lys Lys
1 5 10 15

Ile Gly Gln Ile Ile Lys Ala Ile Arg Lys Leu Val Pro
20 25

<210> 32

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 32

Gly Leu Leu Arg Arg Leu Arg Arg Lys Ile Gly Lys Lys Phe Lys Lys
1 5 10 15

Ile Gly Gln Val Ile Lys His Leu Arg Lys Leu Val Pro
20 25

<210> 33

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 33

Gly Leu Phe Arg Arg Leu Arg Gly Lys Ile Gly Lys Lys Leu Lys Lys
1 5 10 15

Ile Gly Gln Lys Ile Lys Ala Ile Arg Ile Leu Val Pro
20 25

<210> 34

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 34

Gly Leu Phe Arg Arg Leu Gly Lys Lys Ile Gly Lys Lys Leu Lys Lys

1 5 10 15

Phe Gly Gln Val Ile Lys His Ile Arg Ile Leu Val Pro
20 25

<210> 35
<211> 29
<212> PRT
<213> Artificial

<220>
<223> Synthetic antimicrobial peptide

<400> 35

Gly Leu Leu Arg Arg Leu Gly Lys Lys Ile Gly Lys Lys Phe Lys Lys
1 5 10 15

Phe Gly Gln Val Ile Lys Ala Leu Arg Ile Leu Val Pro
20 25

<210> 36
<211> 29
<212> PRT
<213> Artificial

<220>
<223> Synthetic antimicrobial peptide

<400> 36

Gly Leu Phe Arg Arg Leu Gly Arg Lys Ile Gly Lys Lys Leu Lys Lys
1 5 10 15

Ile Gly Gln Val Ile Lys His Ile Arg Ile Leu Val Pro
20 25

<210> 37
<211> 29
<212> PRT
<213> Artificial

<220>
<223> Synthetic antimicrobial peptide

<400> 37

Gly Leu Leu Arg Arg Leu Arg Lys Lys Ile Glu Lys Lys Leu Lys Lys
1 5 10 15

Tyr Gly Pro Lys Ile Lys Ala Leu Arg Lys Leu Val Pro

20

25

<210> 38

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 38

Gly Arg Ile Lys Arg Val Gly Glu Lys Ile Gly Lys Lys Leu Lys Lys

1

5

10

15

Ile Gly Gln Val Ile Lys His Leu Arg Ile Leu Val Pro

20

25

<210> 39

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic antimicrobial peptide

<400> 39